

# Design of forming processes

### Your challenge

You want to optimize an existing forming process? But you do not possess FEM programs for the design of forming processes? For capacity reasons, you currently cannot design your forming processes yourself? You would like to know what potential alternative forming sequences may have? Then we would be happy to support you in the design of respective forming processes.

## Your benefits

 Exact knowledge of the process, even without physical experiments (e.g. in terms of potential forming errors, process times, process forces, etc.)

- Low-effort testing of alternative forming parameters (e.g. temperature, material, forming steps, etc.)
- Reduction of necessary forming tests for the realization of a stable forming process
- Subsequent verification in actual tests possible

#### Our service

- Specification of requirements and definition of objectives with identification of suitable forming processes, determination of materials
- Analysis of the current forming process as a reference (if applicable)
- FEM simulation of forming and tool load based on your component geometry resulting in a suitable raw part geometry
- Preparation and evaluation of the simulation results in usable platform-independent form (e.g. Microsoft Excel)
- Documentation of results



#### Our commitment to quality

- Systematic implementation of the simulations with variation of process parameters and geometries
- Use of modern software with current methods of calculation
- Calculation with a high accuracy (small mesh size)
- Results directly applicable: smooth transferability into construction phase
- Evaluating and recording for low-effort use

#### Your contact person

We would be happy to make you a customized quote. Just contact us!

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For further information about our services in forming technology, please visit:

www.iph-hannover.de/en/services/forming-technology

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